

WHAT IS CLAIMED IS:

1. A method for providing redundant data load sharing in a distributed network, comprising:

receiving a data entry;

5 storing the data entry in a first one and a second one of a plurality of nodes;

identifying a failure of the second one of the plurality of nodes;

10 replicating the data entry in the second one of the plurality of nodes at a third one of the plurality of nodes in response to a failure in the second one of the plurality of nodes.

2. The method of Claim 1, further comprising:

15 determining whether there is sufficient capacity in the distributed network to handle data entry replication in response to the failure of the second one of the plurality of nodes.

20 3. The method of Claim 2, further comprising:

preventing replication of the data entry at the third one of the plurality of nodes in response to insufficient capacity in the distributed network.

25 4. The method of Claim 3, further comprising:

dynamically adjusting the capacity of the distributed network in response to the failure of the second one of the plurality of nodes in order to store new data entries without replication.

5. The method of Claim 3, further comprising:
identifying a recovery of the second one of the
plurality of nodes;

5 performing storage and replication of subsequently
received data entries in response to the recovery of the
second one of the plurality of nodes.

10 6. The method of Claim 5, further comprising:
adjusting the capacity of the distributed network in
response to the recovery of the second one of the
plurality of nodes;

15 7. The method of Claim 5, further comprising:
performing replication of those data entries
previously stored but not replicated as a result of the
failure of the second one of the plurality of nodes.

20 8. The method of Claim 1, further comprising:
identifying a recovery of the second one of the
plurality of nodes;

including the second one of the plurality of nodes
in the storage and replication of subsequent data
entries.

25 9. The method of Claim 1, further comprising:
establishing a capacity for the distributed network,
the capacity representing an amount of data to be stored
in the distributed network;

30 establishing a minimum number of the plurality of
nodes required to provide redundancy in the distributed
network.

10. The method of Claim 9, wherein at least a single occurrence of all data entries are maintained in the plurality of nodes when the number of plurality of nodes falls to one less than the minimum number.

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11. A system for providing redundant data load sharing in a distributed network, comprising:

10 a plurality of nodes, a first one of the plurality of nodes operable to receive and store a data entry, the first one of the plurality of nodes operable to provide a replicate data entry to a second one of the plurality of nodes; the first one of the plurality of nodes operable to determine a failure of the second one of the plurality of nodes, the first one of the plurality of nodes operable to provide the replicate data entry to a third 15 one of the plurality of nodes in response to failure of the second one of the plurality of nodes.

20 12. The system of Claim 11, wherein each node includes a distributed control function operable to control storage and replication of the data entry.

25 13. The system of Claim 11, wherein the first one of the plurality of nodes is operable to determine whether there is sufficient capacity in the distributed network to handle data entry replication in response to the failure of the second one of the plurality of nodes.

30 14. The system of Claim 13, wherein the first one of the plurality of nodes is operable to prevent replication of the data entry at the third one of the plurality of nodes in response to insufficient capacity in the distributed network.

15. The system of Claim 14, wherein the plurality of nodes are operable to dynamically adjust the capacity of the distributed network in response to the failure of the second one of the plurality of nodes in order to 5 store new data entries without replication.

16. The system of Claim 11, wherein the capacity of each of the plurality of nodes is adjusted in response to the addition of a new node.

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17. A system for providing redundant data load sharing in a distributed network, comprising:

means for receiving a data entry;

15 means for storing the data entry in a first one and a second one of a plurality of nodes;

means for identifying a failure of the second one of the plurality of nodes;

20 means for replicating the data entry in the second one of the plurality of nodes at a third one of the plurality of nodes in response to a failure in the second one of the plurality of nodes.

18. The system of Claim 17, further comprising:

25 means for determining whether there is sufficient capacity in the distributed network to handle data entry replication in response to the failure of the second one of the plurality of nodes.

19. The system of Claim 18, further comprising:

30 means for preventing replication of the data entry at the third one of the plurality of nodes in response to insufficient capacity in the distributed network.

20. The system of Claim 19, further comprising:
means for dynamically adjusting the capacity of the
distributed network in response to the failure of the
second one of the plurality of nodes in order to store
5 new data entries without replication.

21. The system of Claim 19, further comprising:
means for identifying a recovery of the second one
of the plurality of nodes;
10 means for performing storage and replication of
subsequently received data entries in response to the
recovery of the second one of the plurality of nodes.

22. A computer readable medium including code for
15 providing redundant data load sharing in a distributed
network, the code operable to:

receive a data entry;
store the data entry in a first one and a second one
of a plurality of nodes;
20 identify a failure of the second one of the
plurality of nodes;
replicate the data entry in the second one of the
plurality of nodes at a third one of the plurality of
25 nodes in response to a failure in the second one of the
plurality of nodes.

23. The computer readable medium of Claim 22,
wherein the code is further operable to:
determine whether there is sufficient capacity in
30 the distributed network to handle data entry replication
in response to the failure of the second one of the
plurality of nodes.

24. The computer readable medium of Claim 23, wherein the code is further operable to:

5 prevent replication of the data entry at the third one of the plurality of nodes in response to insufficient capacity in the distributed network.

25. The computer readable medium of Claim 24, wherein the code is further operable to:

10 dynamically adjust the capacity of the distributed network in response to the failure of the second one of the plurality of nodes in order to store new data entries without replication.

26. The computer readable medium of Claim 24, wherein the code is further operable to:

15 identify a recovery of the second one of the plurality of nodes;

20 perform storage and replication of subsequently received data entries in response to the recovery of the second one of the plurality of nodes.